1: Warner E-5 (1926-1929)1937
OI 17 Murngin OI 17

now modern Queensland, this ratio is reversed and the chief material for pubic decorations or coverings is of vegetable fiber string.

Women's Food Bags.—The women's food bags (like the men's baskets) are so much a part of their ordinary equipment that the writer has placed them in the category of things worn. The natives think of them as such.

The bags are of two major types. The norm of one is around twenty-one inches in length and twelve inches in width, while the other has a norm of eighteen by eight inches. The mesh of the larger bag is usually about one-quarter inch in diameter; the smaller has a mesh of about an eighth to a sixteenth of an inch. Each has a handle of from two to eight strands of fiber string tied to the rim of the bag. The handle is made long enough (sixteen inches) to fit over the forehead of the woman and allow the bag to lie against her back just below the neck.

Two sticks are put in the ground some few inches apart, according to the size of the bag desired, and the basal strand placed around them. The woman squats or sits while weaving. She works from left to right on one side of the sticks, forming the loop-meshes across the basal strand.[1] The finished side is taken from the sticks and put on the opposite side of the stick, so that the weaver now continues working from left to right to finish the other side of the bag. The ends are then sewn together. The basal strand may be removed, but it frequently remains in the bag.

These bags are used by the women to transport cycad nuts, yams, larger lily bulbs, or any other vegetable or animal food brought to camp by them. Men do not use this type of container.

Rarely, to decorate the bags, bands of darker and lighter fiber string are alternated at intervals of about three-quarters of an inch.

Spirit Bags.—Throughout northeastern Arnhem Land the medicine men use a small bag made by the simple loop technique of the woman's food bag. Ordinarily the string used is extremely fine and the mesh about an eighth-inch in diameter. The bag itself is about four to six inches in diameter, and, when stuffed with native cord and tied at the top with vegetable fiber string, is round in shape. It is manufactured exactly as is a woman's food bag. A string handle about sixteen inches long is attached at its neck and worn as a head circlet so that the bag usually reposes over the ear. At times it is worn around the medicine man's neck.

The bag may be decorated with alternating bands of dark and light fiber, or it may have a series of geometrical designs in red, yellow, white, and black painted upon it. Frequently it is also covered with birds' down. At other times the whole bag is completely covered with red ocher, with

[1] "The circular basal strand is identical with the stirrup of the European netter, and is either fixed like it to some circular support or else held in position by passing the leg, big toe, etc., through it: it usually remains as it is, part and parcel of the manufactured article." W. E. Roth, *North Queensland Ethnological Bulletin*, Brisbane, 1901, No. 1, page 12.

1: Warner E-5 (1926-1929) 1937
OI 17 Murngin OI 17

no other ornamentation upon it. The red ocher is not only for decoration, but it adds spirit "power" to the receptacle.

East of the Goyder River the bag is used exclusively by the medicine man, whose spirit helpers reside in it. West of the Goyder River it is also worn by anyone who so desires for good luck in hunting. Here also it is held in the teeth during a fight to add magical powers and bravery to the fighter.

Fighting "Tie."—Sometimes a "tie" is carried in the mouth to gain power during a fight. The tie is made by the same technique as the spirit bag. It is made of coarse vegetable fiber string, is flat, about eighteen inches long and three inches wide, and has a fiber string handle which allows the owner to wear it around his neck when not in use. It has ornamental value, although it is never decorated except with alternating bands of dark and light fiber.

The netting stitch is not used in the making of bags or the tie in this area as it is in Queensland.

Forehead Bands.—This article of ornamentation is made of small thread-like string with a mesh that is a sixteenth of an inch in diameter. Its length and width correspond to the size of the wearer's forehead. It is worn only by males. Each end of the band has a string attached to it for tying at the back of the head. The bands are used in the Gunabibi, Ulmark, and Djungguan ceremonies. They are covered with a solid layer of white pipe clay or red ocher. Sometimes bands are made of paper bark tied with fiber string and painted with red ocher or white clay.

Women's and Children's "Harness."—This curious body ornament used by women and small children looks, when worn, much like a harness used for hitching horses to a carriage. It is composed of one continuous strand of twelve to eighteen strings of two-ply vegetable fiber. The string is formed into two large equal loops which are joined by wrapping with fiber string for a distance of about ten inches. Each loop is then wrapped separately for from two to five inches from both sides of the joint. The wrapped sections are usually painted with alternating white and red or yellow and red bands of paint. The unwrapped string frequently is covered with red ocher.

Women and children wear the harness during ceremonies. The wrapped portion falls down the middle of the back; the arms are slipped through the loops which are made to cross below the breast.

Bugle-grass Necklace.—The bright straw-yellow bugle grass is cut into small beads about one-half inch in length and strung on a thin vegetable fiber string. The string is then looped back and forth to form about eighteen lengths of ten inches each. To each of the two ends of the bunch of loops is attached a single fiber string. The beads are worn against the throat by tying the fiber strings at the back of the wearer's neck. Men, women, and children wear these ornaments. The bright yellow is particularly effective in contrast with the gleaming black skin of the aborigines.

1: Warner E-5 (1926-1929) 1937
OI 17 Murngin OI 17

Paddles and clubs have many traits in common and are obviously under the same technical influences. 501

Anchors.—An anchor consists of a large stone tied to a twelve to eighteen foot turtle rope, attached to the stern of a canoe. The canoe, with the aid of the stone anchor, can then be left near the water so that at low tide it is beached and at high tide it is floating but held from being carried to sea. This comparatively simple invention seems rudimentary and without significance, but a more careful analysis of its function shows it to be quite important. In the first place, instead of a man being forced to watch the tide and to hold the canoe during high tide, or beach it after considerable labor, this simple invention is substituted for him; or, to state it in another way, it takes the place of a man's hands, and is, therefore, one more projection of man's body into his culture through his tools. If the canoe is beached beyond high tide, the labor of several men is required both for taking it out of the water and putting it back again. The anchor acts as a labor-saving device.

5. Tools Used for Gathering Sea Food

Turtle Harpoon.—The turtle harpoon is a modification of the ordinary spear. Its shaft is about fifteen feet long and its diameter is much more than that of the usual spear shaft. The handle section has the usual smooth socket for the articulation of the spear-thrower, but the distal section is constructed entirely differently from that of the ordinary wooden or stone-headed spear. A socket several inches deep is bored into the far end of the shaft; this is used to keep in place the iron prong attached to the turtle rope. When the harpoon has been driven into the back of the turtle, dugong, or other sea animal, the prong comes loose from the shaft. 411

Harpoon Rope.—The rope for deep-sea harpooning and for anchoring a dugout canoe is made of the inner bark of the hibiscus. Unlike the two-ply string, it is composed of three strands. Each strand has a large number of fibers in it and the rope is about five-eighths of an inch in diameter. The harpoon rope is ordinarily about sixty to seventy feet long. It can be spliced by turning back the ends of the two pieces which are to be connected and interlocking the two loops. The strands of each end are then woven into the rope and wrapped with cord. A minimum of four people is necessary to manufacture a harpoon rope. It is never made by women. Whether three-ply rope is a Malay intrusion, a diffused technique from Papua or Melanesia, or invented by the Australian natives, cannot be proved. The fact that it is closely associated with the dugout canoe seems to suggest the Malay hypothesis, since the dugout in the western Arafura Sea is a Malay contribution to this civilization, and since the dugout carried with it the sail and the mast and the anchor rope as part of its complex. 411 283 [177]

Fish Nets.—Fish nets are made not by the loop method but with the ordi- 286

1: Warner E-5 (1926-1929)1937
OI 17 Murngin OI 17

nary netting-stitch technique. The fiber string is tied instead of looped. The net has about a one-inch mesh and is formed out of one piece of string.

Fish Traps.—The Murngin possess several types of fish traps. One type is built at the mouth of a small tidal stream which at high tide is completely covered with water and at low has only the normal small brook flowing down it. A V-shaped trap is made: two arms of stone are piled closely together; sticks are placed where the arms come to a point, and a kind of mesh fence is made which allows the stream to flow through but prevents the fish from escaping. When the tide is up the fish come in and remain until it is too late to swim over the rock barrier.

A second type of fish trap is made to catch larger fish where small rivers flow into larger rivers. A fence is made at the mouth of the small river by driving sharpened sticks into the mud in a solid row except for an opening in the middle. When it is night the natives stand over the opening and listen until they hear several schools of large fish enter chasing minnows. They cover the opening with prepared paper bark and place piles against the bark. They go back to camp and wait until morning. When it is daylight they come out with extra large fish spears and jab them into the pool. The catch is usually large.

The Murngin also possess a separate type of trap to catch minnows in the swamp lakes. A man walks out into the swamp for a distance of about six feet and pulls out the ferns, moss, and leaves to construct a channel about four feet wide back to the edge of the pool. The channel is continued into the more solid land; it is graduated into a funnel shape for about three feet until it is only six or eight inches wide for a distance of about two feet of its length. It is then dug deeper to form an incline which drops to a foot and a half on the land side. A hole about four feet in diameter is excavated to a considerable depth at this end of the channel.

At the beginning of the funnel at the edge of the lake, sticks are put over the water, and grass is spread on top of them. At the end of the funnel a small waterfall is made by the sudden drop in the channel; a loosely woven basket is placed here across the stream so that the water falls into it. The basket is held in place by three sticks pushed through it and into the ground.

The man stands with his legs across the large hole at the land end of the channel (the narrow end of the funnel), and with a piece of eucalyptus bark throws the water behind him and out of the hole. In this way a current is made in the swamp water which the minnows follow. They get into the fast current and are caught in the basket. Literally thousands of them are caught daily. Both men and women construct and use these traps.

If luck is fair, several bags about one foot deep and eight inches wide will be well filled in an hour. Frequently a row of six to eight traps will be seen scattered a hundred yards apart along the edge of a swamp.

5: Webb M-5 (ca. 1930) 1934
OI17 Murngin OI17

either for good or ill. Thus there are found few natural leaders among these people, a man's individuality being submerged in the life of his horde or tribe. This same fact, coupled with the extreme isolation in which this race has for centuries lived, has also served to stultify progress. 157 182 [614]

Only by a man of exceptionally forceful character could reforms be instituted, and life has consequently gone on practically unchanged for countless generations. 178

Toward those whose friendship has been proved these aborigines show a splendid spirit of loyalty. Those who treat them in a fair and friendly fashion will receive fair dealing and devoted friendship in return. 577

Arts and Crafts

The weapons and utensils used throughout this area correspond to the usual aboriginal type, but include a number of local variations. Little use is made of any weapon other than the spear, though clubs of several types are used to a limited extent, as also are boomerangs. 411

There are many varieties of wooden spears, barbed and unbarbed, some of which have the head and the haft fashioned out of a single piece of hardwood in a very remarkable way. Flaked stone spear-heads are much used, particularly for fighting, and these heads are traded over wide distances. [438]

The use of iron, particularly for spear-heads and cutting implements, has been known for many decades, this material being obtained in limited quantities from the old traders from Macassar. Only boomerangs of a heavy type are used, and these are by no means common. The light, return boomerang is unknown, as is also the shield. 177 411 439

Many types of "dilly-bag" are made, some of which are of such fine texture as to retain water. Others are highly decorated with feathers or fur woven in during manufacture. The material used in most cases is the split leaf of the pandanus palm. Other bags are made of string knotted very neatly and evenly in an open mesh. Fish nets are also constructed in the same way. 415 [285] [286]

Excellent string is manufactured from bark fibre, grass, fur, and human hair, and is used for a wide variety of purposes. Much of it designed for ceremonial purposes is decorated with feathers interwoven during spinning. Strong rope is made of bark fibre or grass, and used in the harpooning of turtle, dugong, or porpoise, and for the mooring of canoes. 283

9: Thomson E-5 (1935-1943) 1949
OI17 Murngin OI17

142
286
415
516

Plate 11. A young woman of Central Arnhem Land making one of the fine string net baskets called *ḳai'u*, used for carrying vegetable foods and *gerri*, as well as in ceremonial exchange. (Compare Plate 10 overleaf)

[Facing p. 75]

283 made on the same principle. Three men each take a length of fibre. They twist them and pass them one to another to form a single length of rope. As the rope lengthens it is passed over the limb of a tree and held taut by a fourth man.

286 415 [237] [531] Woven pandanus dilly-bags are pleasing and effective examples of artistic workmanship. Sacred bags are small, but beautifully woven, and are adorned with parrot feathers or fur and sometimes totemically painted. Women make most of them and some are so closely woven that they hold water. The majority, however, are large work bags which hang down their backs and are used to carry yams, shells, roots, and small animals. Another bag is made from string, is similar to the well-known onion bag, and will hold thirty or forty pounds of yams.

292 285 293 [513] The curious 'nganmara' is peculiar to Arnhem Land. It is a house, an umbrella, a garment, a shelter from the wind and rain, a mat on which to sleep, and it is conveniently carried under the arm. This conical straw umbrella mat is woven from pandanus palm; it is circular, with an apex two feet high, and gives some slight protection from sun, wind, or rain. When the nganmara is thrown open on the ground a woman and child can be completely hidden under it. I first saw an nganmara when I was on the King River, where the woman who had it was hunting with her friends. When I asked her to show me the mat under her arm, she calmly handed me the nganmara, which was her only clothing. Knowing that strangers were in the camp, some of the women had politely donned leafy twigs, but this lady relied on her nganmara and deftly swung it from under her arm.

276 [237] In west Arnhem Land, tobacco pipes are made from large crab claws. More elaborate pipes are also made by boring the pithy centre from a soft jungle shrub and plugging